

REMARKS

Applicants have amended claims 1, 7-10 and 14, and added claims 18-19 to concisely and distinctly define and point out the subject matter which Applicants regard as their invention. Further, Applicants respectfully submit that all the pending claims are now in position for allowance, for the following reasons:

Claim Rejections Under 35 U.S.C. 102

Claims 1-11 and 13-17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Dinkel et al. (US Pat. No. 5,643,009, hereinafter, Dinkel)

Response

Regarding amended claim 1, it, inter alia, recites "attaching said each of the wires to a corresponding terminal with the clasps of the terminal being curved to engagingly wrap a part of said each of the wires, the post-curved clasps having a portion to interferentially engage the latch at said channel thereby preventing the terminal from moving rearwardly".

Applicants respectfully submit that Dinkel fails to disclose the attaching step recited in amended claim 1. Specifically, when the contact 70 of Dinkel is attached to a corresponding wire, clasps of the contact 70 wrap around a dielectric layer of the wire. However, the clasps of Dinkel are suspended in the channel receiving the wire, not engaging the pivot lock housing 30 (clearly shown in Dinkel' FIGS. 10 and 11).

It is, therefore, clear that Dinkel fails to disclose or show each and every limitation recited in amended claim 1, and that the invention claimed in amended claim 1 is not anticipated by Dinkel.

Further, Applicants have reviewed the other cited references and conclude that none of them shows or discloses the attaching step recited in amended claim 1.

With the novel feature, after assembling the electrical connector, the clasps of each terminal can abut the latching member when the wire attached to the terminal is unduly pulled or extracted rearwardly. Thereby the terminal can firmly and safely stay in a corresponding cavity of the housing. Reliability of electrical connection between the terminal and a mating conductive member, such as a mating pin, is assured. This is also superior to Dinkel. More specifically, after assembling of the contact 70 of Dinkel in a corresponding passage 16 of the main housing 12, a part of the contact 70 is suspended in a rear end of a corresponding receiving passage 34 of the pivot lock housing 30. After the wire attached to the contact 70 is repeatedly extracted or pull in different directions, the suspended part of the contact 70, especially adjacent the wider section 79b of the contact 70, is bent in said different directions and prone to be damaged, even broken. Thus, it may be relatively difficult to assure reliable electrical connection between the contact 70 and a mating conductive member, such as a mating pin.

In light of the above clarification, Applicants respectfully submit that the rejection proposed should now be withdrawn, and that amended claim 1 is defined patentably over all the references and any combination thereof even under 35 U.S.C. § 103 and should be allowed.

Pending claims 2-9 are directly or indirectly dependent on amended claim 1 and should, therefore, be allowed.

Regarding amended claim 10, it, inter alia, recites "when the latching member is secured to the housing, said at least one clasp is situated outside a corresponding channel and adjacent the housing and prone to abut against the latching member at one end of the channel to prevent the terminal from escaping from a corresponding cavity of the housing when the terminal is urged rearwardly".

Dinkel, in FIG. 11, clearly shows that the clasps of the contact 70 is suspended

in a corresponding receiving passage 34 of the pivot lock housing 30 when the pivot lock housing 30 is attached to the main housing 12. Needless to say that the clasps of the contact 70 are prone to abut against the pivotal lock housing 30 to prevent the contact from escaping from a corresponding passage 16 of the main housing 12 when the contact 70 is urged rearwardly.

Accordingly, Dinkel also fails to show all limitations of amended claim 10. That is, the rejection proposed under 35 U.S.C. § 102 is overcome.

Applicants have studied all other cited references and find out that they all fail to show or disclose the novel feature recited in amended claim 10. Furthermore, with the novel feature, the invention claimed in amended claim 10 can gain the same above-analyzed advantage as the invention claimed in amended claim 1. Therefore, Applicants respectful assert that amended claim 10 is defined over all the references and their combination and should be allowed.

Claims 11-13 and new claims 18-19 directly or indirectly depend on amended claim 10 and should be allowed.

Regarding amended claim 14, it, inter alia, recites "the silos includes another portion to engagingly restrict the corresponding terminal outside a corresponding channel thereby preventing rearward movement of the corresponding terminal".

It is clearly shown in Dinkel' FIG. 11 that the pivotal lock housing 30 has resilient latching fingers 44 secured to the contact 70, with a part of the contact 70 suspended in a corresponding receiving passage 34. That is, the contact 70 is not restricted outside the receiving passage 34. Thus, Dinkel fails to disclose each limitation of amended claim 14. The rejection proposed should, accordingly, now be withdrawn.

Further, Applicants have viewed other cited references and conclude that none of them shows or discloses the new feature recited in amended claim 14.

Additionally, with the new feature, the invention claimed in amended claim 14 also can achieve the same advantage as stated above in connection with overcoming the rejection of claim 1.

It is, therefore, submitted that amended claim 14 is defined patentably over the cited references and any combination thereof and should be allowed.

Claims 15-17 are directly or indirectly dependent on amended claim 14 and should be allowed.

Claim Rejections Under 35 U.S.C. 103

Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Dinkel in view of Fry et al. (US Pat. No. 5,595,509, hereinafter, Fry)

Response

Claim 12 is dependant on amended claim 10 and hence all limitations of amended claim 10 are introduced into claim 12.

As clarified above with respect to overcoming the rejection of claim 10 under U.S.C. § 102, Dinkel fails to disclose or show "when the latching member is secured to the housing, said at least one clasp is situated outside a corresponding channel and adjacent the housing and prone to abut against the latching member at one end of the channel to prevent the terminal from escaping from a corresponding cavity of the housing when the terminal is urged rearwardly", recited in amended claim 10.

Further, Fry also fails to show the latching member of amended claim 10, needless to say disclosing or showing the novel feature. Rather, Fry discloses that after assembling the terminal 54 in a corresponding cavity, crimp arms 84 of the terminal 54 are suspended in the cavity, like the clasps of the contact 70 of Dinkel are suspended in the receiving passage 34 of the pivotal lock housing 30.

Accordingly, even Fry is qualified to combine with Dinkel, said combination still fails to disclose the novel feature. As stated above in connection with overcoming the rejection of claim 10 under U.S.C. §.102, the novel feature brings the invention claimed in amended claim 10 the same advantages.

It is, therefore, respectfully submitted that claim 12 is defined patentably over the references and any combination thereof and should be allowed.

Conclusion

For all the above reasons, Applicants assert that all the pending claims are now in proper form and are patentably distinguishable from the prior art. Therefore, Applicants submit that this application is now in condition for allowance, and that an action to this effect is earnestly requested.

Respectfully submitted,
SHI ET AL.

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